FOR DISCUSSION PURPOSES ONLY

8.23.22 - Changes, Mitigation, and Exceptions SWG Meeting

Adverse Effect

Issue Statement:

It is unclear how the Department determines adverse effect for permits and changes. Stakeholders want a clear definition, based on case law, which is applicable to open and closed basins. The appearance to stakeholders is that DNRC is considering any net depletion to a surface water source as adverse effect. DNRC also needs to review its analyses to determine which ones are actually necessary for evaluating adverse effect.

Working Group ideas/considerations:

- Look at local response, and does the change impact any existing water rights? What is happening in the area of influence, localized analysis, rather than paper analysis.
- Need to get to universal measurement and recordkeeping. In Colorado, these types of MT disputes were rare, because people monitor and there are records.
 - This could help DNRC get away from focusing on theoretical/potential adverse effect
- Need details of existing water rights, otherwise what is available.
- Remove a physical and legal availability analysis/comparison from the adverse effect criteria assessment (physical & legal analysis are separate criteria which apply to new permits)
 - Tried to address this legislatively with the waiver of adverse effect, but water users have concerns about waiving ability to address issues in the future
- DNRC focus has been on <u>potential</u> for adverse effect, not actual findings of certainty of adverse effect

DNRC Draft Recommendation:

Define adverse effect in rule

- Adverse Effect: Adverse effect in the context of the permitting process means an applicant does not prove that they can properly regulate their diversion of water so that:
 - For permits, during times of water shortage, the rights of prior appropriators will be satisfied; and
 - For changes, the historical use of their water right(s) will not be exceeded under the changed conditions or interfere with an appropriator's ability to reasonably exercise their right.

 Reasonable exercise does not prevent a change in condition of water occurrence, such as decrease of streamflow, lowering of a water table, lowering of static water level, or reduction of artesian pressure.

What will DNRC look at to evaluate adverse effect?

• Permits:

- o The Applicant will need to provide a plan which addresses how the new use will not create adverse effect. Part of this plan includes the need for the applicant to show they can control their diversion (ARM 36.12.1706)
 - DNRC will clarify guidance that Legal availability and Adverse Effect are separate criteria and that they are addressed as such (IE: can meet adverse effect criteria on a permit but still have issues with legal availability). In cases where mitigation is needed, mitigation water will apply to both legal availability and adverse effect per rule.

Changes:

- o Coarse Filter (Simple quantitative analysis):
 - Ensure historical use is not going to be exceeded (diverted flow & volume, consumed volume)
- o Fine Filter (Detailed qualitative analysis: proposed updates to permit/change process should allow applicant to address these issues as part of their application whereas before they didn't get info on depleted sources until the Technical Report was issued):
 - For groundwater, does the proposed change have an impact on groundwater users which would cause them not to be able to exercise their right?
 - For impacted surface waters, does the proposed change impact the amount of water available for other users on the source at a regional scale when looked at seasonally (period of diversion/use)?
 - Under process 5.0, public comment period will allow for people to file an objection if they think the significant hydrologic boundary determined is wrong.
 - If there is no net loss, findings are that conditions on source will not be changed and no adverse effect
 - Net loss would be evaluated based on water removed vs left instream (reduction of diverted volume) and the comparison would include any change in amount of return flows or newly depleted sources
 - Mitigation may be used by the Applicant to show no net loss
 - If there is a net loss, next step is to determine if it will impact junior appropriators' ability to exercise their right
 - Depletions: is there a change in depleted sources?
 - o If yes, review depletions using same significant hydrologic boundary as above.
 - Evaluation of Adverse Effect on new depleted sources:
 - Is the source in a closed basin?

- Are there known shortages of water on the newly depleted source?
- If no known issues, no proof of adverse effect.
 Through proposed updated process, if someone disagrees with findings, they can object and provide additional information for DNRC to consider. Also, Applicant gets info up front so they can address how proposal will not create adverse effect on the depleted sources.
- Return flows:
 - o Identify sources & amounts
 - DNRC will complete a return flow analysis that identifies seasonal amount of return flows and location of return flows.
 - DNRC evaluation will look at return flows on a seasonal basis: when did return flows historically accrue, will they continue to accrue in the same seasonal time period
 - o Evaluate how interruption of return flows causes adverse effect
 - Look at rights within area of impact

Discussion points for Working Group

- Changes in depletions:
 - o If new source is depleted as part of a change, how is evaluation of adverse effect completed?
 - o If return flows no longer go to a source, how is evaluation of adverse effect completed?
- Defining regional scale: Do we need specificity on exactly what should define the regional scale, or should there be flexibility to determine it based on the specific details of an application (defined by a significant hydrologic boundary e.g., confluence with another source, geologic boundary, area where return flows accrue, for a POD change: what happens between the new and old PODs)
- Ambiguity and uncertainty: where are there still concerns in the draft document?